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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,934	07/20/2001	Lee Kock Huat	S1436/7005	2402
207	7590	03/19/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP TEN POST OFFICE SQUARE BOSTON, MA 02109			CRUZ, LOURDES C	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/909,934	<b>Applicant(s)</b> HUAT ET AL.	
	<b>Examiner</b> Lourdes Cruz	<b>Art Unit</b> 2827	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's request for reconsideration of the finality of the rejection of the last Office Action is persuasive and, therefore, the finality of that action is **withdrawn** (also see Response to Arguments below). Prosecution has been re-opened since Foreign Priority has been established, and the prior art previously used no longer anticipates the art due to date.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "plurality of leads" must be shown or the features canceled from the claim(s). Also, the examiner would like to point out that claim 2 recites "leads 13", but 13 is not shown in the drawings. No new matter should be entered.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 3778887).

Suzuki et al. discloses (See cover figure):

(Claim 1) A stress relief lead frame (20) comprising a plurality of integrated circuit areas (area under 15), each of said plurality of integrated circuit areas having a die pad (near-round area where all leads 21 meet) and a plurality of leads (21) and a peripheral pad surrounding said plurality of integrated circuit areas, said peripheral pad (see all area around leads where 23 is formed) being provided with a plurality of stress-relief means (23, indentations on left side of 20 to the left of 15, and carved out 24/25).

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~~(Claim 2) A stress-free lead frame (20) comprising;~~ A stress-free lead frame (20) comprising; plurality of integrated circuit areas (area under 15), each of said plurality of integrated circuit areas having a die pad (round area where all leads 21 meet) and a plurality of leads (21); and a peripheral pad (see all area around leads where 23 is formed) surrounding said plurality of integrated circuit areas, said peripheral pad being provided with a plurality of interlocking means (indentations on left side of 20 to the left of 15, and carved out 24/25 ).

(Claim 3) A stress-free lead frame as claimed in Claim 1 wherein said plurality of stress-relief means comprises holes (23) and slots

(indentations on left side of 20 to the left of 15), each hole being a non-elongated opening and each slot being an elongated opening.

(Claim 4) A stress-free lead frame as claimed in Claim 3 wherein said holes and slots are arranged in multiple rows.

(Claim 5) A stress-free lead frame as claimed in Claim 2 wherein each of said interlocking means comprises a plurality of slots each slot being an elongated opening.

(Claim 6) A stress-free lead frame as claimed in Claim 4 wherein said holes and slots are arranged side by side at equal intervals.

(Claim 7) A stress-free lead frame as claimed in Claim 5 wherein said holes and slots are arranged side by side at equal intervals.

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### ***Response to Arguments***

Applicant's arguments, (see paper filed 2-13-2004), with respect to the rejection of claims 1-7 rejected under 35 U.S.C. 102(e) as being anticipated by Golz (DE 100 14 306 A1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Suzuki et al. (US 3778887). No arguments remain unanswered.

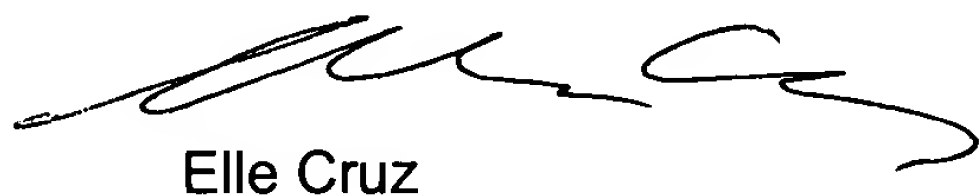
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elle Cruz whose telephone number is (571) 272-1928. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Lourdes Cruz  
Examiner  
Art Unit 2827



Elle Cruz

David A. Zarnke  
David A. Zarnke  
Primary Examiner  
Art 2827  
3/11/4